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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appellant: Katsamberis  
Serial No.: 09/747,250  
Filed: December 21, 2000  
Group Art Unit: 1775  
Examiner: Piziali, Andrew T.  
Title: COATED ARTICLE WITH POLYMERIC BASECOAT

BOX AF  
Assistant Commissioner of Patents  
Washington, D.C. 20231

**APPEAL BRIEF**

Dear Sir:

Subsequent to the filing of the Notice of Appeal on January 10, 2003, Appellant hereby submits its brief. The Office of Petitions granted Appellant two months from February 27, 2003 to submits its brief. A check is enclosed for the \$320.00 appeal brief fee.

**REAL PARTY IN INTEREST**

The real party in interest is Masco Corporation, the assignee of the entire right and interest in this Application.

**RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences.

**STATUS OF CLAIMS**

Claims 1-15 stand finally rejected under 103(a).

**STATUS OF AMENDMENTS**

All amendments have been entered.

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## SUMMARY OF THE INVENTION

As shown in Figure 1, this invention relates to a multi-layer coating on an article 12. The multi-layer coating includes a polymer layer 13 on the surface of the article 12 and a color and protecting layer 32 on the polymer layer 13. The color and protective layer 32 is comprised of refractory metal compound or refractory metal alloy compound. This basic structure is set forth in claim 1. Claim 9 depends on claim 1 and adds that the polymer layer 13 of the multi-layer coating is epoxy urethane.

## ISSUES

- A. Are Claims 1-15 properly rejected under 35 U.S.C. 103(a) based on Welty in view of Simmons?
- B. Is Claims 9 properly rejected under 35 U.S.C. 103(a) based on Welty in view of Simmons?

## GROUPINGS OF CLAIMS

- A. The rejection of Claims 1-15 is contested.
- B. The rejection of Claim 9 is separately contested, that is, the rejection of the Claim does not stand or fall with the rejection of the other Claims.

## PATENTABILITY ARGUMENTS

### **A. The rejection of Claims 1-15 under 35 U.S.C. 103(a) is improper.**

The Examiner finally rejected Claims 1-15 as being obvious based on Welty (United States Patent No. 6,132,889) in view of Simmons (United States Patent No. 6,154,311). Welty discloses a coated article including a substrate 12. A nickel layer 13 is applied on the substrate 12, and a layer 22 of a refractory metal or metal alloy is disposed over the nickel layer 13. In one example, the nickel layer 13 is comprised of a semi-bright nickel layer 14 and a bright nickel layer 16. It is disclosed in column 3, lines 11 to 22 that the duplex nickel layers 14 and 16 provide improved corrosion protection to the underlying substrate 12. A layer 32 of refractory metal compound or

refractory metal alloy compound is vapor deposited over the layer 22. Finally, a layer 34 of the reaction products of refractory metal or refractory metal alloy, oxygen and nitrogen is deposited over the layer 32. Welty does not disclose that the coated article includes any layer of polymer. Simmons discloses a photocatalytic dielectric combiner element 30 having a decorative reflective layer 31 of a vacuum deposited material. When placed upon a hard polymer 32, a decorative reflective finish results that has the ability to level a raw unfinished substrate 34. The Examiner contends that it would be obvious to substitute the nickel layer 13 of Welty with a polymer layer as suggested by Simmons.

The present invention is patentable and strikingly different from the combination of Welty and Simmons. As described by the claims, the present invention provides an article having a multi-layer coating comprising:

layer comprised of polymer on said surface of said article;

color and protective layer comprised of refractory metal compound or refractory metal alloy compound on said layer comprised of polymer.

[See Claim 1]. Claims 1-15 of the present invention all share this same or similar feature. [See Claims 1-15].

It is not obvious to replace the nickel layer 13 of Welty with a polymer layer. A nickel layer is the only type of layer disclosed on the surface of the article of Welty. There is no suggestion in Welty to employ any other layer on the substrate 12 except for nickel.

The polymer layer claimed by Appellant provides many additional benefits and advantages over the prior art nickel layer disclosed in Welty. As disclosed on page 2 of Appellant's specification, a drawback to the nickel layer of the prior art is that the nickel layer is electroplated when applied to a substrate. Welty discloses in column 2, lines 29 to 33, that the nickel layer 13 is deposited on the surface of the substrate 12 by a plating process, such as electroplating or electroless plating. The complex plating process is disclosed in column 2, lines 32 to 64 of Welty. This process has several drawbacks. For one, the process is complex. Additionally, electroplating a nickel layer on a substrate requires electroplating equipment, which is expensive. The electroplating process is

also laborious and time consuming. Appellant's claimed invention overcomes these drawbacks of the Welty prior art. The polymer layer of Appellant's claims eliminates the problems of the prior art as electroplating is not necessary. Appellant's claims are not obvious, and Appellant requests that the rejection be withdrawn.

**B. The rejection of Claim 9 under 35 U.S.C. 103(a) is improper.**

The rejection of claim 9 is separately contested from the rejection of Claim 1 et al. Claim 9 claims that the polymer layer is epoxy urethane. The Examiner states that it would have been obvious to one having ordinary skill in the art at the time the invention was made to select epoxy urethane as the polymeric base coat material. It is not obvious to employ epoxy urethane as the polymer material in Welty. The relevant question is not whether epoxy urethane has ever been employed before. Instead, the question is whether it would have been obvious to employ epoxy urethane in Welty. Clearly, it would not have been as there is no suggestion in Welty to employ any other layer except for nickel.

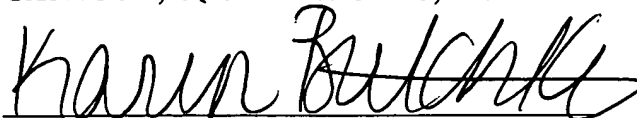
Additionally, neither reference discloses or suggests a layer of epoxy urethane as required by claim 9, and therefore the combination of these references does not disclose or suggest Appellant's claim 9. Simmons only discloses employing organic polyplate barrier (OPB), which is a high temperature polymer. There is no suggestion to employ epoxy urethane in either reference, and Claim 9 is further not obvious in view of the combination of Welty and Simmons.

**CLOSING**

For the reasons set forth above, the rejection of all claims is improper and should be reversed. Appellant respectfully requests such an action.

Respectfully Submitted,

**CARLSON, GASKEY & OLDS, P.C.**

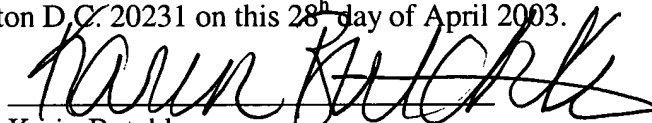


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Dated: April 28, 2003

**CERTIFICATE OF MAIL**

I hereby certify that the enclosed Appeal Brief is being deposited in triplicate with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Box AF, Assistant Commissioner of Patents, Washington D.C. 20231 on this 28<sup>th</sup> day of April 2003.

  
Karin Butchko

**CLAIM APPENDIX**

1. An article having on at least a portion of its surface a multi-layer coating comprising:  
layer comprised of polymer on said surface of said article;  
color and protective layer comprised of refractory metal compound or refractory metal alloy compound on said layer comprised of polymer.
2. The article of claim 1 wherein said refractory metal compound or refractory metal alloy compound is selected from the group consisting of nitrides, carbides, oxides and carbonitrides.
3. The article of claim 2 wherein said refractory metal compound or refractory metal alloy compound is a refractory metal nitride or refractory metal alloy nitride.
4. The article of claim 1 wherein a layer comprised of refractory metal or refractory metal alloy is on said layer comprised of polymer.
5. The article of claim 1 wherein a layer comprised of refractory metal oxide or refractory metal alloy oxide is on said layer comprised of refractory metal compound or refractory metal alloy compound
6. The article of claim 4 wherein a layer comprised of refractory metal oxide or refractory metal alloy oxide is on said layer comprised of refractory metal compound or refractory metal alloy compound.
7. The article of claim 4 wherein a layer comprised of the reaction products of (i) refractory metal or refractory metal alloy, (ii) oxygen and (iii) nitrogen is on said layer comprised of refractory metal compound or refractory metal alloy compound.

8. The article of claim 2 wherein a layer comprised of the reaction products of (i) refractory metal or refractory metal alloy, (ii) oxygen and (iii) nitrogen is on said layer comprised of refractory metal compound or refractory metal alloy compound.
9. The article of claim 1 wherein said layer comprised of polymer is comprised of epoxy urethane.
10. The article of claim 1 wherein said refractory metal compound or refractory metal alloy compound is selected from the group consisting of nitrides and carbonitrides.
11. The article of claim 10 wherein a layer comprised of refractory metal or refractory metal alloy is on said layer comprised of polymer.
12. The article of claim 10 wherein a layer comprised of refractory metal oxide or refractory metal alloy oxide is on said color and protective layer.
13. The article of claim 11 wherein a layer comprised of refractory metal oxide or refractory metal alloy oxide is on said color and protecting layer.
14. The article of claim 10 wherein a layer comprised of reaction products of (i) refractory metal or refractory metal alloy, (ii) oxygen and (iii) nitrogen is on said color and protective layer.
15. The article of claim 11 wherein a layer comprised of reaction products of (i) refractory metal or refractory metal alloy, (ii) oxygen and (iii) nitrogen is on said color and protective layer.